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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,147	05/02/2001	David W. Conrad	00RE196	6574

7590 11/06/2003  
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EXAMINER

ADDISON, KAREN B

ART UNIT PAPER NUMBER

2834

DATE MAILED: 11/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/847,147

Applicant(s)

CONRAD ET AL.

Examiner

Karen B Addison

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12, 18, 20 and 22-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-11, 18, 20 and 24-29 is/are allowed.
- 6) ☒ Claim(s) 1-4, 7, 22 and 23 is/are rejected.
- 7) ☒ Claim(s) 8 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1) ☐ Certified copies of the priority documents have been received.  
2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Allowable Subject Matter***

1. Claims 9-11, 18, 20, 24-29 are allowed.
2. Claims 8 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
3. The following is a statement of reasons for the indication of allowable subject matter:

Prior art fails to show, a break portion coupled to the second integral field cup and front end shield having a electromagnetic coil support within the second side of the integral field cup and front end shield. Prior art also fails to show a compression spring disposed between the electromagnetic coil and an armature plate, wherein the armature plate being coupled to a friction disk coupled to the motor shaft and the compression spring which is operable to move the armature plate and the friction disk axially against a stationary plate to hold the motor shaft in a rotatably fixed state.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4,7, 22 and 23 rejected under 35 U.S.C. 103(a) as being unpatentable over Hancock (2520204) in view of Nashiki (5039900).

Hancock discloses an electric motor and break system in fig. 1 comprising: an electrical coil (24) surrounded by a frame (12), a motor shaft (12) coupled to the electrical core; a end shield (14) coupled to the frame located at the drive end of the motor; an a integral field cup and front end shield having a first side (14) and a second side (16) wherein, the first side is coupled to the frame located at an opposite drive end of the motor.

Hancock also discloses, a first bearing (18) assembly coupled to an inside surface of the end shield (operable to support the motor shaft at the drive end of the motor) and a second bearing (20) assembly coupled the first side of the integral cup and front end shield (operable to supported the motor shaft at the opposite drive end of the motor).

Hancock also discloses a break portion including an electromagnetic coil (32) supported within the second side of the integral cup field cup an front –end shield and a fan located outside the break portion. However, Hancock does disclosed, a armature plate, friction disk, stationary plate, a first bearing assembly being disposed between a first inner cap and an inside surface of the end shield and a second bearing assembly being disposed between a second inner cap and an inside surface of the first side of the integral field cup and front end.

Nashiki discloses a electric motor and breaking system in fig. 1 comprising: a brake portion (10) coupled on the first side and second side of the front end shield wherein, the end shield is coupled to the second side of the armature plate (13) which is coupled to a friction disk (14) that's is coupled to the motor shaft (4) wherein, the armature plate

is operable to actuate axially towards the friction disk and a stationary plate (15).

Nashiki also discloses the friction disk holding the motor shaft in a rotatably fixed state; a first bearing assembly being disposed between a first inner cap (A) and an inside surface of the end shield; a second bearing assembly (D); being disposed between a second inner cap (B) and an inside surface of the first side of the integral field cup and front end shield for the purpose of supporting the bearing. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the breaking system of Hancock with the bearing and brake configuration of Nashiki for the purpose of supporting the bearing. The method is inherent based on the structural limitations of the claims.

5. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hancock in view of Nashiki as applied to claims 1-4, 7, 22 and 23 above, and further in view of Rossi.

Hancock and Nashiki substantially disclose the claimed invention. However, neither Hancock nor Nashiki discloses a front end shield comprising two concentric ring shaped extrusion and axially extending fins alongside the outside surface of the integral cup and front end shield.

Rossi discloses an electric motor and braking system in fig. 1 and 3 comprising: an integral field cup and front-end shield having a second side with two concentric ring shaped extrusion (A&B) and a frame (19) having axially extending fins (28) alongside the outside surface of the integral cup and front-end shield for the purpose of dissipating heat. Therefore, it would have been obvious to one having ordinary skill in the art at the

time the invention was made to modify the break system of Nashiki with Rossi's integral field cup and front-end shield for the purpose of supporting the electromagnetic coils and bearing assembly.

Referring to claim 5, It has been held that the recitation that an element is adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute an limitation in any patentable sense. In re Hutchison, 69 USPQ 1 38.

### ***Response to Arguments***

6. Applicant's arguments filed 6/13/03 have been fully considered but they are not persuasive.

In response to the applicant argument that Hancock alone or in combination with Nashiki and Rossi fails to teach a armature plate operable to actuate axially towards the friction disk and a stationary plate and a fan locked outside the brake is noted.

However, Hancock in combination with Nashiki clearly teaches a brake portion (10) coupled on the first side and second side of the front end shield wherein, the end shield is coupled to the second side of the armature plate (13) which is coupled to a friction disk (14) that's is coupled to the motor shaft (4) wherein, the armature plate is operable to actuate axially towards the friction disk and a stationary plate (15).

### ***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen B Addison whose telephone number is 703-306-5855. The examiner can normally be reached on 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 703-308-1317. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

A handwritten signature in black ink, appearing to read "Thomas M. O'Leary". The signature is written in a cursive style with a large, stylized "O" and "L".